

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,208	11/04/2003	Kenji Uchiyama	9319S-75/DVA	5177
27572	7590 04/19/2005		EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			AHMED, SHEEBA	
P.O. BOX 82 BLOOMFIE	LOOMFIELD HILLS, MI 48303		ART UNIT	PAPER NUMBER
•			1773	
		DATE MAILED: 04/19/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	1) 10	Application No.	Applicant(s)				
Office Action Summary		10/701,208	UCHIYAMA, KENJI				
		Examiner	Art Unit				
		Sheeba Ahmed	1773				
The MAILI Period for Reply	NG DATE of this communication app	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM							
THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive	e to communication(s) filed on <u>27 Ja</u>	nuary 2005.					
2a)⊠ This action	This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this a	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claim	ns						
4) Claim(s) <u>1 and 3-10</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1 and 3-10</u> is/are rejected.							
	7) Claim(s) is/are objected to.						
8) Claim(s)	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.	S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Oce the attac	offed detailed office action for a list	or the defining depices not receive					
Attachment(s)							
Notice of Reference	s Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) D Notice of Draftspers	on's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D					
3) [_] Information Disclosu Paper No(s)/Mail Da	ure Statement(s) (PTO-1449 or PTO/SB/08) ate	6)  Other:	atom ryphobatori (r. 10-102)				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office Ac	etion Summary Pa	art of Paper No./Mail Date 04182005				

Application/Control Number: 10/701,208

**Art Unit: 1773** 

#### **DETAILED ACTION**

## Response to Amendment

1. Amendments to claims 1, 6, and 7 have been entered in the above-identified application. New claims 8-10 have been added.

Claims 1 and 3-10 are now pending.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Goto et al. (US 6,042,894).

Goto et al. disclose an anisotropically electroconductive resin film having electroconductivity in the thickness direction alone via the electroconductive particles dispersed in the film (Column 1, lines 8-12). The film is produced by sticking electroconductive particles to a sticking layer and filling a film forming resin, which is incompatible with the sticking material among the electroconductive particles (Column 5, lines 8-18). The film forming resin is an insulating adhesive and the electroconductive particles are buried in the sticking layer to a depth of half or less of

Art Unit: 1773

the particle size of the electroconductive particles (Column 6, lines 10-11 and 35-39). The electroconductive particles are dispersed with different concentration in the film thickness direction (Column 6, lines 59-61). Goto et al. further provide a fine electrode connected structure obtained by placing oppositely fine electrodes of a plurality of electronic parts on the substantially same plane, and sandwiching between said oppositely placed electrodes said anisotropically electroconductive film having electroconductivity only in the thickness direction via the electroconductive particles having elasticity exposed to the air on front and rear sides of said film to provide electrical connection. With regards to the limitation that the first adhesive layer and second adhesive layer are formed of the same material, the Examiner takes the position that such a limitation simply implies that the anisotropic material of the claimed invention is simply an adhesive layer containing electrically conductive particles and the product of the claimed invention is the same as that disclosed in the above reference.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 3-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki (US 4,696,764).

Art Unit: 1773

Yamazaki discloses an anisotropically conductive composition, which provides electric conductivity between facing electrodes but maintains electric insulation in the lateral direction across the facing direction (Column 1, lines 5-10). The composition comprises (a) a nonconductive base resin and (b) electrically conductive particles incorporated and dispersed in the resin (Column 1, lines 24-27). Example 1 states that the anisotropically conductive composition is printed on a terminal to have a thickness of 30 micrometers and contains particles having a diameter of 0.5 micrometers (hence meeting the limitation that the particle diameter of the electrically conductive particles is smaller than ½ of the thickness of the first adhesive layer). The composition can also be used to connect circuits with each other and terminals of passive elements (condensers, coils) and active elements (IC, diodes, transistors) of electric component parts. With regards to the limitation that the first adhesive layer and second adhesive layer are formed of the same material, the Examiner takes the position that such a limitation simply implies that the anisotropic material of the claimed invention is simply an adhesive layer containing electrically conductive particles and the product of the claimed invention is the same as that disclosed in the above reference.

## Response to Arguments

4. Applicant's arguments filed on January 27, 2005 have been fully considered but they are not persuasive. Applicants traverse the rejection of claims 6 and 7 under 35 U.S.C. 102(e) as being anticipated by Goto et al. (US 6,042,894) and argue that the

**Art Unit: 1773** 

Goto discloses only a single conductive layer and does not disclose an anisotropic conductive adhesive agent for electrically connecting first and second terminals.

However, the Examiner disagrees. The Examiner has taken the position that the anisotropic material of the claimed invention is simply an adhesive layer containing electrically conductive particles and the product of the claimed invention is the same as that disclosed by Goto. Furthermore, Goto et al. specifically teach that their resin film can be used to form a connected structure by placing oppositely electrodes of a plurality of electronic parts of any kind.

Applicants further traverse the rejection of claims 1 and 3-7 under 35

U.S.C. 102(b) as being anticipated by Yamazaki (US 4,696,764) and submit that

Yamazaki does not disclose an anisotropic conductive adhesive agent for electrically
connecting first and second terminals. Applicants further argue that Yamazaki does not
teach that the first layer has been adapted for application to the first terminal and that
the second layer has been adapted for application to the second terminals. The
Examiner would like to point out that Yamazaki specifically teaches that their
composition can be used to connect circuits with each other and terminals of passive
elements (condensers, coils) and active elements (IC, diodes, transistors) of electric
component parts.

#### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1773

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

**Art Unit: 1773** 

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheeba Ahmed Art Unit 1773 April 14, 2004